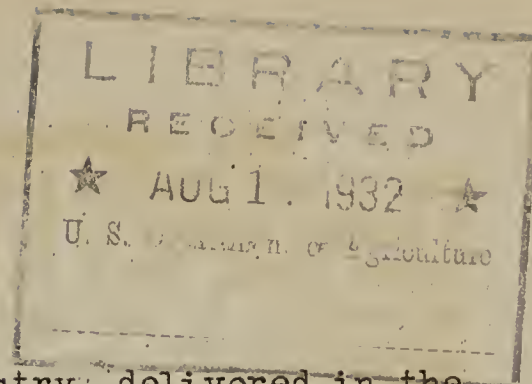


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THE GARDEN CALENDAR



A radio talk by W. R. Beattie, Bureau of Plant Industry, delivered in the Department of Agriculture period of the National Farm and Home Hour, broadcast by a network of 48 associate NBC radio stations, Tuesday, August 2, 1932.

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I don't want to appear to be "rubbing a sore spot" today by telling you farmers and gardeners a story about weeds, but this is the season of the year when many of our most troublesome weeds are ripening their seeds, and my story has to do with the length of time that weed seeds will remain in the ground, and still be able to torment you. I think Mr. Salisbury recently gave you a brief account of this experiment that I am going to tell you about, but I just want to go a little more into the details than he did.

Thirty years ago this summer - in 1902 to be exact - two ambitious young scientists connected with the Seed Laboratory work of the Bureau of Plant Industry, went out into the fields and byways around Washington and gathered seeds of every kind of weed that they could find, and it is needless for me to add, they found a plenty. One hundred and twelve sets of these weed seeds, also seeds of certain cultivated plants, were made up, and these were all buried in the ground at the Arlington Experimental Farm, just across the Potomac River from the Washington Monument. The seeds were placed in flower pots filled with soil and were then buried 8 , 22, and 42 inches deep.

Different sets of the seeds have been dug up from time to time and tests made to see if they would grow. In 1923 there were 51 varieties of seeds that germinated when they were dug up and planted. This year, after 30 years in the ground, 35 kinds were still alive, and grew when planted. Still more of the seeds remain buried, and it is the plan to continue to dig up a set every few years and plant them to see if they will grow.

One of the surprises we got from the test made this year was the rapidity with which some of these weed seeds grew after having lain deeply buried in the ground for thirty years. I'll not give you the whole list, but here are some of the seeds which grow readily after their 30-year Rip Van Winkle sleep. Foxtail, Kentucky Bluegrass, smartweed, curled dock, broad-leaved dock, lamb's-quarters, pokeberry, alsike clover, red clover, bindweed, wild morning glory, Jimson weed, common plantain, ragweed, Scotch thistle, black-eyed-Susan, and Oxeye daisy. Mind you that is just a few of the ones that grow, but enough I think to illustrate my point that many of our most troublesome weeds will live in the soil for many years then come forth to trouble us.

I've seen farmers and gardeners, in fact, I've done it myself, plow under great crops of ripening weeds to get them out of sight. They argued that if you plowed them under deep enough, they wouldn't come up. Quite true, that is, not immediately, but just wait a few years, perhaps 5 or 10 years, and then turn those weed seeds to the surface where they will get the air, and see how quickly they'll give you trouble. It is all right to turn the weeds under to add humus to the soil, but they should be gotten under before their seeds have reached a stage of maturity where they will grow.

(over)

This experiment with the buried seeds has been of great interest to me, and it was started a short time after I entered the work of the Department. I hardly expect to be here when the final resurrection of these buried seeds takes place, but I do think that 30 years is sufficient proof of the vitality, of certain of our most common and troublesome weed seeds. The results of this experiment with the buried weed seeds should be a warning to every truck gardener and farmer who is in the habit of letting weeds go to seed on his place, and then plowing them under.

In this day of limited supplies of manure for use on our truck farms and our gardens, we are compelled to turn to other sources of organic matter for the upkeep of our soils. A crop of grass or weeds will add to the organic matter in the soil, if turned under at the proper time, but a heavy growth of clover, soy beans, velvet beans, or, some other leguminous crop, will prove of much greater value. Now is the time in many parts of the country to plant these late summer, fall, and winter crops for soil improvement, furthermore, where the land is heavily covered by a soil-improving crop, there is very little opportunity for the weeds to grow and produce seeds that will hide away in the soil, later to spring into growth and torment us the rest of our natural lives.

And here's another point folks, the surface soil of the garden, orchard, or truck farm that is kept well covered with soil-improving crops during the fall and winter will not be half so likely to wash away during heavy rains. There are several crops, that are adapted for use as soil blankets in the various parts of the country. New ones are being introduced, and you can get the latest information on where to secure the seed, and how to plant and grow these crops to best advantage, by consulting your local county agricultural agent.

I thought you would all be interested in the story about the buried weed seeds, and the lesson it teaches, but I just couldn't help adding the other suggestions about planting a cover or blanket crop to keep the weeds from growing, and at the same time, improve your soil and prevent its washing away. Next Tuesday, I may have another practical service story for you, and I'll be seeing you.